Using Automated Storage to Optimize Costs and Improve Quality

The Customer and Their Requirements

Trinchero Family Estates is a worldwide leader in the wine industry, with more than 45 acclaimed wine and spirits brands and a global presence in nearly 50 countries. The family-owned business has been passed through three generations of Trincheros since it was founded in 1947, expanding steadily as it grew sales and added brands. The Sutter Home brand alone has grown into one of the top wine brands in the U.S. with sales of more than 10 million cases annually.

In 2013, Trinchero Family Estates made the decision to centralize its bottling and distribution with its production in a new facility that would leverage automation. The facility had to support seamless product movement between production and distribution as well as accommodate products received from co-manufacturers and other TFE bottling sites.

The primary challenge the company faced was achieving the throughput and speed desired. Other challenges associated with this major supply chain transformation included consolidating inventory from the two distribution centers into one high-density location and providing visibility and control of product as it moved through bottling and distribution.

Growth & Impact



Increased Throughput

249 Pallets per Hour



Increase in Inventory Accuracy

Inventory control is 99.998%

swisslog

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"The first piece of advice I would give any company attempting an automation project similar to ours is to partner very closely with Swisslog throughout the process. Swisslog listened and worked with us to understand our business first rather than just selling something to us. Their industry and technical expertise was vital to our ability to transform our supply chain to increase speed, reduce costs and improve quality control."

 Kent Mann, VP of Operations, Trinchero Family Estates





Reduced Transportation Costs

Minimization of product damage



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Trinchero Family Estates

Significant Increase in Throughput, Energy Savings and Inventory Accuracy



PowerStore is a robotic storage and retrieval system designed for deep lane storage of palletized loads. The simultaneous use of automated storage and retrieval devices, along with lifts performing work independently allows PowerStore to support extremely high-density storage with exceptional throughput rates.

The solution designed through a collaborative effort between Swisslog and Trinchero featured a four-module Swisslog PowerStore system and more than 3,500 feet of Swisslog ProMove conveyors connecting bottling and receiving with the PowerStore system.

The PowerStore system configured for Trinchero provides high-density storage in nine vertical layers and intelligently manages inventory to optimize compaction and support first-in first-out management.

The system can store more than 72,000 pallets—over 4 million cases—in just 190,000 square feet, with throughputs of up to 249 pallets per hour.



The Results

- Movement of 249 pallets per hour in and out of storage while maintaining complete control over inventory
- Elimination of the need to ship product from wine production to bottling
- Minimized handling within the warehouse
- Savings in transportation costs and minimization of product damage
- Increase in throughput
 - Single distribution center able to carry the load of two facilities
- Maintain tight control over temperatures for all products in storage
- Improved inventory accuracy and elimination of the need to conduct a monthly physical inventory
 - Results in an additional 12 shipping days annually
- Decrease in truck staging time
 - Beating the 30-minute staging time target by 14%

"This project has done exactly what we hoped it would. It has reduced costs, improved quality, and positioned us for future growth."

Kent Mann, VP of Operations, Trinchero Family Estates

